

## SEQUENCE LISTING

<110> Bukh, Jens  
Purcell, Robert  
Yanagi, Masayuki  
Emerson, Suzanne

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<130> NIH257.001NP

<140> US 10/009,002

<141> 2001-12-03

<150> PCT/US00/15293

<151> 2000-06-02

<150> US 60/137,694

<151> 1999-06-04

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Thr Arg Lys Thr Ser Glu Arg Ser Gln Pro Arg Gly Arg Arg Gln Pro
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Ile Pro Lys Asp Arg Arg Ser Thr Gly Lys Ser Trp Gly Lys Pro Gly
65          70          75          80
Tyr Pro Trp Pro Leu Tyr Gly Asn Glu Gly Leu Gly Trp Ala Gly Trp
      85          90          95
Leu Leu Ser Pro Arg Gly Ser Arg Pro Ser Trp Gly Pro Asn Asp Pro
      100         105         110
Arg His Arg Ser Arg Asn Val Gly Lys Val Ile Asp Thr Leu Thr Cys
      115         120         125
Gly Phe Ala Asp Leu Met Gly Tyr Ile Pro Val Val Gly Ala Pro Leu
      130         135         140
Gly Gly Val Ala Arg Ala Leu Ala His Gly Val Arg Val Leu Glu Asp
145          150          155          160
Gly Val Asn Phe Ala Thr Gly Asn Leu Pro Gly Cys Ser Phe Ser Ile
      165         170         175
Phe Leu Leu Ala Leu Leu Ser Cys Ile Thr Thr Pro Val Ser Ala Ala
      180         185         190
Glu Val Lys Asn Ile Ser Thr Gly Tyr Met Val Thr Asn Asp Cys Thr
      195         200         205
Asn Asp Ser Ile Thr Trp Gln Leu Gln Ala Ala Val Leu His Val Pro
      210         215         220
Gly Cys Val Pro Cys Glu Lys Val Gly Asn Ala Ser Gln Cys Trp Ile
225          230          235          240
Pro Val Ser Pro Asn Val Ala Val Gln Arg Pro Gly Ala Leu Thr Gln
      245         250         255
Gly Leu Arg Thr His Ile Asp Met Val Val Met Ser Ala Thr Leu Cys
      260         265         270
Ser Ala Leu Tyr Val Gly Asp Leu Cys Gly Gly Val Met Leu Ala Ala
      275         280         285
Gln Met Phe Ile Val Ser Pro Gln His His Trp Phe Val Gln Asp Cys

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290						295					300				
Asn	Cys	Ser	Ile	Tyr	Pro	Gly	Thr	Ile	Thr	Gly	His	Arg	Met	Ala	Trp
305					310					315					320
Asp	Met	Met	Met	Asn	Trp	Ser	Pro	Thr	Ala	Thr	Met	Ile	Leu	Ala	Tyr
				325					330					335	
Ala	Met	Arg	Val	Pro	Glu	Val	Ile	Ile	Asp	Ile	Ile	Ser	Gly	Ala	His
			340					345					350		
Trp	Gly	Val	Met	Phe	Gly	Leu	Ala	Tyr	Phe	Ser	Met	Gln	Gly	Ala	Trp
	355					360					365				
Ala	Lys	Val	Val	Val	Ile	Leu	Leu	Leu	Ala	Ala	Gly	Val	Asp	Ala	Arg
	370				375					380					
Thr	His	Thr	Val	Gly	Gly	Ser	Ala	Ala	Gln	Thr	Thr	Gly	Arg	Leu	Thr
385				390					395					400	
Ser	Leu	Phe	Asp	Met	Gly	Pro	Arg	Gln	Lys	Ile	Gln	Leu	Val	Asn	Thr
			405					410						415	
Asn	Gly	Ser	Trp	His	Ile	Asn	Arg	Thr	Ala	Leu	Asn	Cys	Asn	Asp	Ser
			420					425					430		
Leu	His	Thr	Gly	Phe	Ile	Ala	Ser	Leu	Phe	Tyr	Thr	His	Ser	Phe	Asn
	435					440						445			
Ser	Ser	Gly	Cys	Pro	Glu	Arg	Met	Ser	Ala	Cys	Arg	Ser	Ile	Glu	Ala
	450				455					460					
Phe	Arg	Val	Gly	Trp	Gly	Ala	Leu	Gln	Tyr	Glu	Asp	Asn	Val	Thr	Asn
465				470					475					480	
Pro	Glu	Asp	Met	Arg	Pro	Tyr	Cys	Trp	His	Tyr	Pro	Pro	Arg	Gln	Cys
			485					490						495	
Gly	Val	Val	Ser	Ala	Lys	Thr	Val	Cys	Gly	Pro	Val	Tyr	Cys	Phe	Thr
	500						505						510		
Pro	Ser	Pro	Val	Val	Val	Gly	Thr	Thr	Asp	Arg	Leu	Gly	Ala	Pro	Thr
	515					520						525			
Tyr	Thr	Trp	Gly	Glu	Asn	Glu	Thr	Asp	Val	Phe	Leu	Leu	Asn	Ser	Thr
	530				535				540						
Arg	Pro	Pro	Leu	Gly	Ser	Trp	Phe	Gly	Cys	Thr	Trp	Met	Asn	Ser	Ser
545				550					555					560	
Gly	Tyr	Thr	Lys	Thr	Cys	Gly	Ala	Pro	Pro	Cys	Arg	Thr	Arg	Ala	Asp
			565					570						575	
Phe	Asn	Ala	Ser	Thr	Asp	Leu	Leu	Cys	Pro	Thr	Asp	Cys	Phe	Arg	Lys
	580					585							590		
His	Pro	Asp	Thr	Thr	Tyr	Leu	Lys	Cys	Gly	Ser	Gly	Pro	Trp	Leu	Thr
	595					600						605			
Pro	Arg	Cys	Leu	Ile	Asp	Tyr	Pro	Tyr	Arg	Leu	Trp	His	Tyr	Pro	Cys
	610				615				620						
Thr	Val	Asn	Tyr	Thr	Ile	Phe	Lys	Ile	Arg	Met	Tyr	Val	Gly	Gly	Val
625				630					635					640	
Glu	His	Arg	Leu	Thr	Ala	Ala	Cys	Asn	Phe	Thr	Arg	Gly	Asp	Arg	Cys
			645					650						655	
Asn	Leu	Glu	Asp	Arg	Asp	Arg	Ser	Gln	Leu	Ser	Pro	Leu	Leu	His	Ser
	660					665						670			
Thr	Thr	Glu	Trp	Ala	Ile	Leu	Pro	Cys	Ser	Tyr	Ser	Asp	Leu	Pro	Ala
	675					680						685			
Leu	Ser	Thr	Gly	Leu	Leu	His	Leu	His	Gln	Asn	Ile	Val	Asp	Val	Gln
	690				695				700						
Phe	Met	Tyr	Gly	Leu	Ser	Pro	Ala	Leu	Thr	Lys	Tyr	Ile	Val	Arg	Trp
705				710					715					720	
Glu	Trp	Val	Ile	Leu	Leu	Phe	Leu	Leu	Leu	Ala	Asp	Ala	Arg	Val	Cys
			725					730						735	

Ala	Cys	Leu	Trp	Met	Leu	Ile	Leu	Leu	Gly	Gln	Ala	Glu	Ala	Ala	Leu
			740						745				750		
Glu	Lys	Leu	Val	Ile	Leu	His	Ala	Ala	Ser	Ala	Ala	Ser	Cys	Asn	Gly
		755					760					765			
Phe	Leu	Tyr	Phe	Val	Ile	Phe	Phe	Val	Ala	Ala	Trp	Tyr	Ile	Lys	Gly
	770					775					780				
Arg	Val	Val	Pro	Leu	Ala	Thr	Tyr	Ser	Leu	Thr	Gly	Leu	Trp	Ser	Phe
785					790					795					800
Ser	Leu	Leu	Leu	Leu	Ala	Leu	Pro	Gln	Gln	Ala	Tyr	Ala	Tyr	Asp	Ala
				805					810					815	
Ser	Val	His	Gly	Gln	Ile	Gly	Ala	Ala	Leu	Leu	Val	Met	Ile	Thr	Leu
			820					825					830		
Phe	Thr	Leu	Thr	Pro	Gly	Tyr	Lys	Thr	Leu	Leu	Ser	Arg	Phe	Leu	Trp
		835					840					845			
Trp	Leu	Cys	Tyr	Leu	Leu	Thr	Leu	Gly	Glu	Ala	Met	Val	Gln	Glu	Trp
	850					855					860				
Ala	Pro	Pro	Met	Gln	Val	Arg	Gly	Gly	Arg	Asp	Gly	Ile	Ile	Trp	Ala
865					870					875					880
Val	Ala	Ile	Phe	Tyr	Pro	Gly	Val	Val	Phe	Asp	Ile	Thr	Lys	Trp	Leu
			885						890					895	
Leu	Ala	Val	Leu	Gly	Pro	Ala	Tyr	Leu	Leu	Lys	Gly	Ala	Leu	Thr	Arg
			900					905					910		
Val	Pro	Tyr	Phe	Val	Arg	Ala	His	Ala	Leu	Leu	Arg	Met	Cys	Thr	Met
		915					920					925			
Ala	Arg	His	Leu	Ala	Gly	Gly	Arg	Tyr	Val	Gln	Met	Ala	Leu	Leu	Ala
	930					935					940				
Leu	Gly	Arg	Trp	Thr	Gly	Thr	Tyr	Ile	Tyr	Asp	His	Leu	Thr	Pro	Met
945					950					955					960
Ser	Asp	Trp	Ala	Ala	Ser	Gly	Leu	Arg	Asp	Leu	Ala	Val	Ala	Val	Glu
			965						970					975	
Pro	Ile	Ile	Phe	Ser	Pro	Met	Glu	Lys	Lys	Val	Ile	Val	Trp	Gly	Ala
		980						985						990	
Glu	Thr	Ala	Ala	Cys	Gly	Asp	Ile	Leu	His	Gly	Leu	Pro	Val	Ser	Ala
	995						1000						1005		
Arg	Leu	Gly	Arg	Glu	Val	Leu	Leu	Gly	Pro	Ala	Asp	Gly	Tyr	Thr	Ser
	1010					1015					1020				
Lys	Gly	Trp	Ser	Leu	Leu	Ala	Pro	Ile	Thr	Ala	Tyr	Ala	Gln	Gln	Thr
1025					1030					1035					1040
Arg	Gly	Leu	Leu	Gly	Thr	Ile	Val	Val	Ser	Met	Thr	Gly	Arg	Asp	Lys
			1045						1050					1055	
Thr	Glu	Gln	Ala	Gly	Glu	Ile	Gln	Val	Leu	Ser	Thr	Val	Thr	Gln	Ser
		1060						1065					1070		
Phe	Leu	Gly	Thr	Ser	Ile	Ser	Gly	Val	Leu	Trp	Thr	Val	Tyr	His	Gly
	1075						1080						1085		
Ala	Gly	Asn	Lys	Thr	Leu	Ala	Gly	Ser	Arg	Gly	Pro	Val	Thr	Gln	Met
	1090					1095					1100				
Tyr	Ser	Ser	Ala	Glu	Gly	Asp	Leu	Val	Gly	Trp	Pro	Ser	Pro	Pro	Gly
1105					1110					1115					1120
Thr	Lys	Ser	Leu	Glu	Pro	Cys	Thr	Cys	Gly	Ala	Val	Asp	Leu	Tyr	Leu
			1125						1130					1135	
Val	Thr	Arg	Asn	Ala	Asp	Val	Ile	Pro	Ala	Arg	Arg	Arg	Gly	Asp	Lys
		1140						1145					1150		
Arg	Gly	Ala	Leu	Leu	Ser	Pro	Arg	Pro	Leu	Ser	Thr	Leu	Lys	Gly	Ser
	1155						1160					1165			
Ser	Gly	Gly	Pro	Val	Leu	Cys	Pro	Arg	Gly	His	Ala	Val	Gly	Val	Phe

1170	1175	1180
Arg Ala Ala Val Cys Ser Arg Gly Val Ala Lys Ser Ile Asp Phe Ile		
1185	1190	1195
Pro Val Glu Thr Leu Asp Ile Val Thr Arg Ser Pro Thr Phe Ser Asp		1200
	1205	1210
Asn Ser Thr Pro Pro Ala Val Pro Gln Thr Tyr Gln Val Gly Tyr Leu		1215
	1220	1225
His Ala Pro Thr Gly Ser Gly Lys Ser Thr Lys Val Pro Val Ala Tyr		1230
	1235	1240
Ala Ala Gln Gly Tyr Lys Val Leu Val Leu Asn Pro Ser Val Ala Ala		1245
	1250	1255
Thr Leu Gly Phe Gly Ala Tyr Leu Ser Lys Ala His Gly Ile Asn Pro		1260
1265	1270	1275
Asn Ile Arg Thr Gly Val Arg Thr Val Thr Thr Gly Ala Pro Ile Thr		1280
	1285	1290
Tyr Ser Thr Tyr Gly Lys Phe Leu Ala Asp Gly Gly Cys Ala Gly Gly		1295
	1300	1305
Ala Tyr Asp Ile Ile Ile Cys Asp Glu Cys His Ala Val Asp Ser Thr		1310
	1315	1320
Thr Ile Leu Gly Ile Gly Thr Val Leu Asp Gln Ala Glu Thr Ala Gly		1325
	1330	1335
Val Arg Leu Thr Val Leu Ala Thr Ala Thr Pro Pro Gly Ser Val Thr		1340
1345	1350	1355
Thr Pro His Pro Asn Ile Glu Glu Val Ala Leu Gly Gln Glu Gly Glu		1360
	1365	1370
Ile Pro Phe Tyr Gly Arg Ala Ile Pro Leu Ser Tyr Ile Lys Gly Gly		1375
	1380	1385
Arg His Leu Ile Phe Cys His Ser Lys Lys Lys Cys Asp Glu Leu Ala		1390
	1395	1400
Ala Ala Leu Arg Gly Met Gly Leu Asn Ser Val Ala Tyr Tyr Arg Gly		1405
	1410	1415
Leu Asp Val Ser Val Ile Pro Thr Gln Gly Asp Val Val Val Val Ala		1420
1425	1430	1435
Thr Asp Ala Leu Met Thr Gly Tyr Thr Gly Asp Phe Asp Ser Val Ile		1440
	1445	1450
Asp Cys Asn Val Ala Val Thr Gln Val Val Asp Phe Ser Leu Asp Pro		1455
	1460	1465
Thr Phe Thr Ile Thr Thr Gln Ile Val Pro Gln Asp Ala Val Ser Arg		1470
	1475	1480
Ser Gln Arg Arg Gly Arg Thr Gly Arg Gly Arg Leu Gly Ile Tyr Arg		1485
	1490	1495
Tyr Val Ser Thr Gly Glu Arg Ala Ser Gly Met Phe Asp Ser Val Val		1500
1505	1510	1515
Leu Cys Glu Cys Tyr Asp Ala Gly Ala Ala Trp Tyr Glu Leu Thr Pro		1520
	1525	1530
Ser Glu Thr Thr Val Arg Leu Arg Ala Tyr Phe Asn Thr Pro Gly Leu		1535
	1540	1545
Pro Val Cys Gln Asp His Leu Glu Phe Trp Glu Ala Val Phe Thr Gly		1550
	1555	1560
Leu Thr His Ile Asp Ala His Phe Leu Ser Gln Thr Lys Gln Ser Gly		1565
	1570	1575
Glu Asn Phe Ala Tyr Leu Thr Ala Tyr Gln Ala Thr Val Cys Ala Arg		1580
1585	1590	1595
Ala Lys Ala Pro Pro Pro Ser Trp Asp Val Met Trp Lys Cys Leu Thr		1600
	1605	1610
		1615

Arg	Leu	Lys	Pro	Thr	Leu	Val	Gly	Pro	Thr	Pro	Leu	Leu	Tyr	Arg	Leu		
			1620					1625					1630				
Gly	Ser	Val	Thr	Asn	Glu	Val	Thr	Leu	Thr	His	Pro	Val	Thr	Lys	Tyr		
		1635					1640					1645					
Ile	Ala	Thr	Cys	Met	Gln	Ala	Asp	Leu	Glu	Val	Met	Thr	Ser	Thr	Trp		
	1650					1655					1660						
Val	Leu	Ala	Gly	Gly	Val	Leu	Ala	Ala	Val	Ala	Ala	Tyr	Cys	Leu	Ala		
1665					1670				1675						1680		
Thr	Gly	Cys	Val	Cys	Ile	Ile	Gly	Arg	Leu	His	Ile	Asn	Gln	Arg	Ala		
			1685					1690						1695			
Val	Val	Ala	Pro	Asp	Lys	Glu	Val	Leu	Tyr	Glu	Ala	Phe	Asp	Glu	Met		
		1700						1705					1710				
Glu	Glu	Cys	Ala	Ser	Arg	Ala	Ala	Leu	Ile	Glu	Glu	Gly	Gln	Arg	Ile		
	1715					1720						1725					
Ala	Glu	Met	Leu	Lys	Ser	Lys	Ile	Gln	Gly	Leu	Leu	Gln	Gln	Ala	Ser		
	1730					1735					1740						
Lys	Gln	Ala	Gln	Asp	Ile	Gln	Pro	Thr	Val	Gln	Ala	Ser	Trp	Pro	Lys		
1745				1750						1755					1760		
Val	Glu	Gln	Phe	Trp	Ala	Lys	His	Met	Trp	Asn	Phe	Ile	Ser	Gly	Ile		
		1765						1770						1775			
Gln	Tyr	Leu	Ala	Gly	Leu	Ser	Thr	Leu	Pro	Gly	Asn	Pro	Ala	Val	Ala		
	1780							1785					1790				
Ser	Met	Met	Ala	Phe	Ser	Ala	Ala	Leu	Thr	Ser	Pro	Leu	Ser	Thr	Ser		
	1795						1800					1805					
Thr	Thr	Ile	Leu	Leu	Asn	Ile	Leu	Gly	Gly	Trp	Leu	Ala	Ser	Gln	Ile		
	1810				1815						1820						
Ala	Pro	Pro	Ala	Gly	Ala	Thr	Gly	Phe	Val	Val	Ser	Gly	Leu	Val	Gly		
1825				1830					1835						1840		
Ala	Ala	Val	Gly	Ser	Ile	Gly	Leu	Gly	Lys	Val	Leu	Val	Asp	Ile	Leu		
		1845						1850						1855			
Ala	Gly	Tyr	Gly	Ala	Gly	Ile	Ser	Gly	Ala	Leu	Val	Ala	Phe	Lys	Ile		
	1860							1865					1870				
Met	Ser	Gly	Glu	Lys	Pro	Ser	Met	Glu	Asp	Val	Val	Asn	Leu	Leu	Pro		
	1875						1880					1885					
Gly	Ile	Leu	Ser	Pro	Gly	Ala	Leu	Val	Val	Gly	Val	Ile	Cys	Ala	Ala		
	1890				1895						1900						
Ile	Leu	Arg	Arg	His	Val	Gly	Pro	Gly	Glu	Gly	Ala	Val	Gln	Trp	Met		
1905				1910					1915						1920		
Asn	Arg	Leu	Ile	Ala	Phe	Ala	Ser	Arg	Gly	Asn	His	Val	Ala	Pro	Thr		
		1925						1930						1935			
His	Tyr	Val	Thr	Glu	Ser	Asp	Ala	Ser	Gln	Arg	Val	Thr	Gln	Leu	Leu		
	1940							1945					1950				
Gly	Ser	Leu	Thr	Ile	Thr	Ser	Leu	Leu	Arg	Arg	Leu	His	Asn	Trp	Ile		
	1955						1960					1965					
Thr	Glu	Asp	Cys	Pro	Ile	Pro	Cys	Gly	Gly	Ser	Trp	Leu	Arg	Asp	Val		
	1970					1975					1980						
Trp	Asp	Trp	Val	Cys	Thr	Ile	Leu	Thr	Asp	Phe	Lys	Asn	Trp	Leu	Thr		
1985				1990					1995						2000		
Ser	Lys	Leu	Phe	Pro	Lys	Met	Pro	Gly	Leu	Pro	Phe	Val	Ser	Cys	Gln		
		2005						2010						2015			
Lys	Gly	Tyr	Lys	Gly	Val	Trp	Ala	Gly	Thr	Gly	Ile	Met	Thr	Thr	Arg		
	2020							2025					2030				
Cys	Pro	Cys	Gly	Ala	Asn	Ile	Ser	Gly	Asn	Val	Arg	Leu	Gly	Ser	Met		
	2035						2040					2045					
Arg	Ile	Thr	Gly	Pro	Lys	Thr	Cys	Met	Asn	Ile	Trp	Gln	Gly	Thr	Phe		

2050	2055	2060			
Pro Ile Asn Cys Tyr Thr Glu Gly Gln Cys Val Pro Lys Pro Ala Pro					
2065	2070	2075			2080
Asn Phe Lys Val Ala Ile Trp Arg Val Ala Ala Ser Glu Tyr Ala Glu					
	2085	2090			2095
Val Thr Gln His Gly Ser Tyr His Tyr Ile Thr Gly Leu Thr Thr Asp					
	2100	2105			2110
Asn Leu Lys Val Pro Cys Gln Leu Pro Ser Pro Glu Phe Phe Ser Trp					
	2115	2120			2125
Val Asp Gly Val Gln Ile His Arg Phe Ala Pro Thr Pro Lys Pro Phe					
	2130	2135			2140
Phe Arg Asp Glu Val Ser Phe Cys Val Gly Leu Asn Ser Phe Val Val					
2145	2150	2155			2160
Gly Ser Gln Leu Pro Cys Asp Pro Glu Pro Asp Thr Asp Val Leu Met					
	2165	2170			2175
Ser Met Leu Thr Asp Pro Ser His Ile Thr Ala Glu Thr Ala Ala Arg					
	2180	2185			2190
Arg Leu Ala Arg Gly Ser Pro Pro Ser Glu Ala Ser Ser Ser Ala Ser					
	2195	2200			2205
Gln Leu Ser Ala Pro Ser Leu Arg Ala Thr Cys Thr Thr His Gly Lys					
	2210	2215			2220
Ala Tyr Asp Val Asp Met Val Asp Ala Asn Leu Phe Met Gly Gly Asp					
2225	2230	2235			2240
Val Thr Arg Ile Glu Ser Gly Ser Lys Val Val Val Leu Asp Ser Leu					
	2245	2250			2255
Asp Pro Met Val Glu Glu Arg Ser Asp Leu Glu Pro Ser Ile Pro Ser					
	2260	2265			2270
Glu Tyr Met Leu Pro Lys Lys Arg Phe Pro Pro Ala Leu Pro Ala Trp					
	2275	2280			2285
Ala Arg Pro Asp Tyr Asn Pro Pro Leu Val Glu Ser Trp Lys Arg Pro					
	2290	2295			2300
Asp Tyr Gln Pro Ala Thr Val Ala Gly Cys Ala Leu Pro Pro Pro Arg					
2305	2310	2315			2320
Lys Thr Pro Thr Pro Pro Pro Arg Arg Arg Arg Thr Val Gly Leu Ser					
	2325	2330			2335
Glu Asp Ser Ile Gly Asp Ala Leu Gln Gln Leu Ala Ile Lys Ser Phe					
	2340	2345			2350
Gly Gln Pro Pro Pro Ser Gly Asp Ser Gly Leu Ser Thr Gly Ala Gly					
	2355	2360			2365
Ala Ala Asp Ser Gly Ser Gln Thr Pro Pro Asp Glu Leu Ala Leu Ser					
	2370	2375			2380
Glu Thr Gly Ser Ile Ser Ser Met Pro Pro Leu Glu Gly Glu Leu Gly					
2385	2390	2395			2400
Asp Pro Asp Leu Glu Pro Glu Gln Val Glu Pro Gln Pro Pro Pro Gln					
	2405	2410			2415
Gly Gly Val Ala Ala Pro Gly Ser Asp Ser Gly Ser Trp Ser Thr Cys					
	2420	2425			2430
Ser Glu Glu Asp Asp Ser Val Val Cys Cys Ser Met Ser Tyr Ser Trp					
	2435	2440			2445
Thr Gly Ala Leu Ile Thr Pro Cys Ser Pro Glu Glu Glu Lys Leu Pro					
	2450	2455			2460
Ile Asn Pro Leu Ser Asn Ser Leu Leu Arg Tyr His Asn Lys Val Tyr					
2465	2470	2475			2480
Cys Thr Thr Thr Lys Ser Ala Ser Leu Arg Ala Lys Lys Val Thr Phe					
	2485	2490			2495

Asp	Arg	Met	Gln	Val	Leu	Asp	Ser	Tyr	Tyr	Asp	Ser	Val	Leu	Lys	Asp
			2500					2505					2510		
Ile	Lys	Leu	Ala	Ala	Ser	Lys	Val	Thr	Ala	Arg	Leu	Leu	Thr	Met	Glu
		2515					2520					2525			
Glu	Ala	Cys	Gln	Leu	Thr	Pro	Pro	His	Ser	Ala	Arg	Ser	Lys	Tyr	Gly
	2530					2535				2540					
Phe	Gly	Ala	Lys	Glu	Val	Arg	Ser	Leu	Ser	Gly	Arg	Ala	Val	Asn	His
2545				2550						2555					2560
Ile	Lys	Ser	Val	Trp	Lys	Asp	Leu	Leu	Glu	Asp	Ser	Glu	Thr	Pro	Ile
			2565					2570						2575	
Pro	Thr	Thr	Ile	Met	Ala	Lys	Asn	Glu	Val	Phe	Cys	Val	Asp	Pro	Thr
			2580					2585					2590		
Lys	Gly	Gly	Lys	Lys	Ala	Ala	Arg	Leu	Ile	Val	Tyr	Pro	Asp	Leu	Gly
		2595					2600					2605			
Val	Arg	Val	Cys	Glu	Lys	Met	Ala	Leu	Tyr	Asp	Ile	Thr	Gln	Lys	Leu
	2610					2615				2620					
Pro	Gln	Ala	Val	Met	Gly	Ala	Ser	Tyr	Gly	Phe	Gln	Tyr	Ser	Pro	Ala
2625				2630						2635					2640
Gln	Arg	Val	Glu	Phe	Leu	Leu	Lys	Ala	Trp	Ala	Glu	Lys	Lys	Asp	Pro
			2645						2650					2655	
Met	Gly	Phe	Ser	Tyr	Asp	Thr	Arg	Cys	Phe	Asp	Ser	Thr	Val	Thr	Glu
		2660						2665					2670		
Arg	Asp	Ile	Arg	Thr	Glu	Glu	Ser	Ile	Tyr	Arg	Ala	Cys	Ser	Leu	Pro
		2675					2680					2685			
Glu	Glu	Ala	His	Thr	Ala	Ile	His	Ser	Leu	Thr	Glu	Arg	Leu	Tyr	Val
	2690					2695					2700				
Gly	Gly	Pro	Met	Phe	Asn	Ser	Lys	Gly	Gln	Thr	Cys	Gly	Tyr	Arg	Arg
2705				2710						2715					2720
Cys	Arg	Ala	Ser	Gly	Val	Leu	Thr	Thr	Ser	Met	Gly	Asn	Thr	Ile	Thr
			2725						2730					2735	
Cys	Tyr	Val	Lys	Ala	Leu	Ala	Ala	Cys	Lys	Ala	Ala	Gly	Ile	Ile	Ala
		2740						2745				2750			
Pro	Thr	Met	Leu	Val	Cys	Gly	Asp	Asp	Leu	Val	Val	Ile	Ser	Glu	Ser
		2755					2760					2765			
Gln	Gly	Thr	Glu	Glu	Asp	Glu	Arg	Asn	Leu	Arg	Ala	Phe	Thr	Glu	Ala
	2770					2775					2780				
Met	Thr	Arg	Tyr	Ser	Ala	Pro	Pro	Gly	Asp	Pro	Pro	Arg	Pro	Glu	Tyr
2785				2790						2795					2800
Asp	Leu	Glu	Leu	Ile	Thr	Ser	Cys	Ser	Ser	Asn	Val	Ser	Val	Ala	Leu
			2805						2810					2815	
Gly	Pro	Gln	Gly	Arg	Arg	Arg	Tyr	Tyr	Leu	Thr	Arg	Asp	Pro	Thr	Thr
		2820						2825					2830		
Pro	Ile	Ala	Arg	Ala	Ala	Trp	Glu	Thr	Val	Arg	His	Ser	Pro	Val	Asn
	2835						2840</								

2930		2935		2940	
Arg Ala Arg Ala Val	Arg Ala Ser Leu Ile	Ser Arg Gly Gly Arg Ala			
2945	2950	2955	2960		
Ala Val Cys Gly Arg Tyr Leu Phe Asn Trp	Ala Val Lys Thr Lys Leu				
	2965	2970	2975		
Lys Leu Thr Pro Leu Pro Glu Ala Arg Leu Leu Asp Leu Ser Ser Trp					
	2980	2985	2990		
Phe Thr Val Gly Ala Gly Gly Gly Asp Ile Tyr His Ser Val Ser Arg					
	2995	3000	3005		
Ala Arg Pro Arg Leu Leu Leu Phe Gly Leu Leu Leu Leu Phe Val Gly					
	3010	3015	3020		
Val Gly Leu Phe Leu Leu Pro Ala Arg					
3025	3030				